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**TESTIMONY OF  
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U.S. ENVIRONMENTAL PROTECTION AGENCY  
BEFORE THE  
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS  
UNITED STATES SENATE**

**October 18, 2005**

**Introduction**

Thank you, Mr. Chairman and Members of the Committee for the invitation to appear here today and provide testimony on S. 1772, the Gas Petroleum Refiner Improvement and Community Empowerment Act. I am Brian Mannix, the Associate Administrator of the Office of Policy, Economics and Innovation at the Environmental Protection Agency (EPA). I commend the Committee for proposing steps to address the nation's critical need for additional refining capacity and a sustained fuel supply. The issue of refinery permitting is not new. I was at the Energy Department during the 1978-79 oil crisis and we tried to address it then. While conditions in 2005 are certainly different from those that occurred at the end of the 1970's, it is incumbent on us both to learn from the past experience as well as to plan for the future.

I know that you have also heard that more than 100 refineries have been closed during the past 25 years. Most of the refineries that closed were not economically feasible, and existed to collect a variety of government subsidies, mostly associated with oil price and allocation regulations, which disappeared in 1981. Since that time, overall refining capacity has increased primarily through expansion at existing facilities.

As the events of the last two months have helped demonstrate, however, the nation needs to expand and diversify the location of its modern refining capacity. The entire country has felt the impact of the hurricanes on retail gas prices. Major refineries remain shut down or are operating at a reduced capacity in Louisiana and Texas due to hurricanes Katrina and Rita. I believe a streamlined permitting process can be part of the solution. We also should make other improvements in the operation of our nation's fuel production and supply system.

This Administration is committed to ensuring that industry is able to produce and distribute gasoline, diesel fuel, jet fuel, and home heating oil to consumers while protecting the environment and public health. To assist the Senate in its review of these conditions and consideration of legislation, I would like to briefly: 1) review the Agency's actions with respect fuel supply and distribution issues that occurred in response to the recent hurricanes; 2) outline current environmental permitting requirements for petroleum refineries; 3) highlight some of our most recent regulatory reforms and initiatives that are reducing unnecessary burden and streamlining the regulatory requirements that affect the fuel sector; and 4) discuss S. 1772, the Gas Petroleum Refiner Improvement and Community Empowerment Act.

### **Response to Hurricanes Katrina and Rita**

Over the past two months, natural disasters in the Gulf region have resulted in increased gasoline prices. The damage caused by hurricanes Katrina and Rita disrupted between 13 and 25 percent of the nation's fuel capacity and the recovery of oil production, natural gas production and refinery throughput is continuing.

EPA responded quickly and decisively in addressing the fuel supply disruption in the Gulf Region, in conjunction with the Department of Energy. In the days immediately following hurricane Katrina, the disruption to the fuel production and distribution infrastructure made it necessary to minimize the potential for supply disruption and create the greatest flexibility possible for the fuel distribution system.

Beginning on August 30, two days after hurricane Katrina hit the Gulf Coast, EPA issued various temporary waivers that applied to: 1) low sulfur diesel fuel requirements; 2) Reid Vapor Pressure (RVP) standards for the control of volatility of gasoline during the summer months; 3) state gasoline sulfur limits; and 4) reformulated gasoline requirements (RFG). To address each fuel supply situation, the waivers were issued for various periods of time and have been applicable at the national, state or local level. Several waivers are still in effect for RFG requirements in the Houston/Dallas Ft. Worth area, for the Texas Low-Emission Diesel Program, for RFG requirements applicable to the Richmond, Virginia, and St. Louis, Missouri, and certain conventional fuel produced in Louisiana. In addition, waiver of low-sulfur diesel requirements are continuing in the Petroleum Administration for Defense District (PADD) III and certain other PADD I and II states. These waivers were granted in response to requests from Governors to address fuel supply and distribution issues, and to serve the public interest. Whenever we issue such fuel waivers, we address the risk of contamination of emission control systems in motor vehicles.

In addition to our short-term actions, we are working to address long-term concerns. To facilitate construction of new refineries to meet energy needs, EPA is reviewing the new authority conferred on the Agency through Title III, Subtitle H of the Energy Policy Act of 2005.

This law authorizes the Administrator to enter into a refinery permitting cooperative agreement with a state; to accept a consolidated application for all environmental permits required by EPA for a refinery; and to enter into a Memorandum of Agreement with other federal agencies and states to coordinate consideration of refinery permits. It also authorizes the EPA to provide financial, technical and other assistance to states related to refinery permits.

#### **S. 1772, the Gasoline Petroleum Refiner Improvement and Community Empowerment Act**

I would like to address various provisions of this bill that either confer new authority to EPA or involve the Agency's implementation of existing statutory authority.

#### **Title II – Refinery Permitting Process**

We can, and should, take steps to improve the efficiency of our permitting process and remove any unnecessary burden and delay.

In general, domestic refining capacity has increased through steady expansion of operations at existing refineries, even as smaller refineries have closed. Because most permits are issued by state and local authorities, EPA does not routinely track permitting activities for refineries and cannot provide precise numbers concerning such activity. However, based on information we currently have in technology clearinghouses and a recent survey of refinery activities, we estimate that approximately 100 permits have been issued to refineries since 2000. It should be noted that, at this juncture, EPA cannot determine how many of these permits were issued for expanded production. Approximately 60 of the permit applications in

2000-2003 involved projects to comply with Tier 2 gasoline requirements and may not necessarily involve increased production capacity.

A broad scope of environmental issues may be present in siting a new facility or expanding the capacity of an existing one pursuant to the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the National Environmental Policy Act and other federal, state and local laws. Substantial “up front” work is also required regarding site and design factors prior to the submission of an application for a new refinery. Depending on the complexity of the refinery and the siting, the permitting process can take between one and two years *after* a complete application is filed. Those seeking to construct refineries may also revise their applications after they have been submitted. In addition, administrative appeals during the permitting process and judicial review can add substantially to the time required for final approval.

As mentioned earlier, under current federal environmental law and regulations, state and local authorities consider and approve most of the environmental permits that are required for refineries. States may also impose separate or additional requirements on refineries that can be more stringent than those required for compliance with federal law and regulations. In addition, state and local decision-making with respect to refineries and other large industrial and commercial facilities can frequently involve land use and other local issues, such as conditional use permits, local fire, building and plumbing codes, as well as connections to sewer systems and construction approvals.

With respect to the Committee's review of S. 1772, it may be helpful to briefly outline in more detail some of the specific requirements applicable to refineries under our nation's major environmental laws.

### **Clean Air Act Permitting**

Currently, a number of permitting provisions stemming from the Clean Air Act apply to construction of a new refinery or expansion of an existing refinery. A New Source Review (NSR) permit must be obtained before construction starts. States typically take 12-18 months to issue NSR permits for large facilities, although this time period can vary significantly and does not include the additional time needed if an administrative appeal is filed.

A Title V "operating permit" is also required for a refinery that constitutes a major source. This program was added to the Clean Air Act in the 1990 amendments to consolidate in a single document all federal and state regulations applicable to the source. It does not create new substantive requirements. Once it submits a complete application, the facility can operate under an "application shield" while the Title V permit is being processed. States must take final action on the permit application within 18 months. If the permit applicant or an interested stakeholder disagrees with the permit terms or conditions, they may file an administrative appeal or petition. This will add additional time to the process, although the facility can continue to operate during the appeals process.

Applicants for a new refinery would also need to comply with other Clean Air Act regulations including New Source Performance Standards, emission standards for hazardous air pollutants and Compliance Assurance Monitoring requirements. Depending on the location of a

facility, emission “offsets” may also be required based on the facility’s emissions.

The President's Clear Skies cap and trade approach will give our states a powerful, efficient and proven tool for meeting new, health-based air quality standards for fine particles and ozone. EPA has informed over 500 counties that they either do not meet or that they contribute to another county not meeting the new standards. That relatively straightforward action has now triggered a complex process for the states to develop and implement plans to meet the national standards.

Clear Skies, in conjunction with the Bush Administration's new rules cutting diesel engine pollution by more than 90 percent and other Clean Air Act programs, will bring most counties into attainment with the new standards without having to take any new local measures beyond the Clear Skies power plant reductions. To the extent Clear Skies can provide for attainment of Clean Air Act health-based standards, states and local governments will have a lighter burden in putting together their local control strategies to attain the National Ambient Air Quality Standards (NAAQS). This may result in an ability at the state and local level to accommodate new or expanded manufacturing or refining activities within plans to meet the NAAQS.

### **Clean Water Act Permitting**

As you know, refineries, similar to other facilities, are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit if they discharge pollutants from a point source into waters of the U.S. Similar to our Clean Air Act programs, EPA has authorized states to issue permits to most states with a few exceptions. The state programs closely mirror the federal program, but some have additional requirements such as public notice and comment



periods or technical requirements that go beyond the federal requirements. The federal program does provide a number of permitting flexibilities.

EPA recently finalized the pretreatment streamlining rule, which amends certain provisions of the General Pretreatment Regulations regarding oversight of industrial users that discharge to Publically Owned Treatment Works (POTWs). The pretreatment streamlining rule will reduce the regulatory burden on both indirect industrial dischargers as well as POTW Control Authorities without adversely affecting environmental protection. It will also allow Control Authorities to better focus oversight resources on Industrial Users with the greatest potential for affecting POTW operations or the environment. The reduction in regulatory burden is applicable to both existing Industrial Users and to any new Industrial Users, including any new refineries which choose to discharge pollutants to a POTW, rather than directly to surface waters via a NPDES permit. One change to the regulations specifically benefits refineries and organic chemical manufacturers. POTWs are allowed to use concentration-based standards rather than calculate mass limits based on a facility's wastewater discharge. This amendment will make it easier for POTWs to implement the standards and for facilities to monitor their own performance.

The changes EPA recently adopted also provide another type of flexibility to POTWs by authorizing them to use general permits instead of an individual permit in certain circumstances. General permits cover multiple facilities within a specific category. This type of permit provides a cost-effective option for permitting agencies because of the large number of facilities that can be covered under a single permit. For example, a large number of facilities that have certain elements in common may be covered under a general permit without expending the time and

money necessary to issue an individual permit to each of these facilities. In addition, using a general permit ensures consistency of permit conditions for specific facilities.

### **Resource Conservation and Recovery Act (RCRA) Permitting**

Regulated entities that generate hazardous waste are subject to waste accumulation, manifesting, and record-keeping standards. Facilities that treat, store, or dispose of hazardous waste must obtain a permit either from EPA or, more likely from a state agency that EPA has authorized to implement the permitting program. States may have more stringent requirements than the federal RCRA program.

It has been the EPA's experience that more recent petroleum refineries generally are designed to only store materials in secure containers and tanks for less than 90 days, so that they are most often classified as generators only, and thus are not subject to RCRA permitting. However, a few petroleum refineries do have RCRA permits and in circumstances where a refinery expansion results in a change in hazardous waste management, a permit modification may be required. The modification process depends on the significance of the modification and obtaining a permit could take 1-2 years, depending on complexity. A temporary authorization (to start constructing the changes while awaiting the modification approval) may be allowable in certain circumstances.

The Agency has already taken steps to streamline the RCRA permitting process. Specifically, in September, EPA issued the RCRA standardized permit rule, which allows certain waste facilities to submit an abbreviated permit application. These newly streamlined permitting requirements result in a shorter permitting time line and shorter time lines for any subsequent

permit modifications. It is estimated that the standardized permitting process will save the states and industry more than three million dollars a year.

Finally, the Agency continues to promote innovative ways waste can be used to supplement the nation's energy supplies. EPA currently excludes specific industrial wastes, known as comparable fuels, from the hazardous waste management requirements of RCRA when they are used for energy production and do not contain hazardous constituent levels that exceed those found in a typical benchmark fuel used by facilities. This type of waste utilization saves energy by reducing the amount of hazardous waste that would otherwise be treated and disposed. EPA is examining the effectiveness of the current RCRA comparable fuel program and considering whether other industrial wastes could be safely used as well.

### **Title III – Efficiency**

Now I would like to briefly discuss Title III, Efficiency. These provisions concern utilizing EPA's Natural Gas STAR program as a grant vehicle for entities seeking to reduce methane emissions in the oil and gas industries, and direct EPA to organize workshops on methane emission reduction techniques. The Natural Gas STAR Program is a voluntary partnership that encourages companies to adopt cost-effective technologies and practices that improve operational efficiency and reduce emissions of methane. EPA managers and program staff are currently assessing this provision of the bill, including its effect on current program resources.

#### **Title IV – Fuel Emergency Waivers and Boutique Fuel Requirements.**

Section 401 of this title provides a “hold harmless” provision for states for emissions resulting from waivers granted by EPA under the new fuel emergency waiver provisions contained in the Energy Policy Act of 2005.

To date, EPA believes that its exercise of the new waiver authority contained in section 1541 of the Energy Policy Act of 2005 has not resulted in excessive emissions. For example, on August 30, EPA issued waivers of federal RVP standards effectively allowing the early sale of “wintertime gasoline.” Since the sale of “summertime” RVP-controlled gasoline ends in most parts of the country on September 15, as an initial matter, the Agency does not believe that any increased emissions resulting from the waiver for the two week period prior to September 15 were substantial. In addition, EPA would note that the letter informing states and other parties that the waiver had been granted provided that, to the extent practicable, those involved in the fuel distribution system take all reasonable steps to distribute and sell on-hand inventories of compliant fuel. The Agency, however, will continue to review this matter as conditions justifying the granting of fuel waivers continue to exist.

Section 402 of S. 1772 amends section 211(c)(4)(C)(vii) of the Clean Air Act. This provision was also part of the recently enacted Energy Policy Act of 2005. This provision requires the EPA to remove a fuel from the list of fuels that are otherwise approvable as part of a State Implementation Plan (SIP) if such a fuel ceases to be included in a SIP or is identical to a federal fuel formulation implemented by EPA.

In general, Section 211 of the Clean Air Act authorizes EPA, under certain conditions, to approve individual state fuels as part of a State Implementation Plan. While such individual state

fuels, often known as “boutique fuels” normally do not strain the fuel production and distribution system, the variation in state and local fuel requirements can make it more difficult to address gasoline supply shortages in times of disruption, such as occurred with the recent hurricanes.

Roughly fifteen states have adopted their own clean fuel programs -- typically requiring fuels to be sold within the state or within certain areas in the state, to have a lower seasonal volatility than federal standards. As noted in a Staff White Paper produced by EPA in 2001, we believe that constraining the number of boutique fuels could potentially be beneficial in terms of improving fuel distribution and fungibility. However, such action should be done in a careful manner in order to ensure that environmental benefits of clean fuels are maintained and any unintended negative impacts on fuel supply are avoided.

#### **Title V – Future Fuels**

This provision requires the EPA to conduct a research and demonstration program to evaluate the air quality benefits of Fischer-Tropsch transportation fuel and authorizes loan guarantees for domestic coal and petroleum coke-based Fischer-Tropsch commercial demonstration projects. We are currently evaluating this provision and its impact on the Agency’s overall resources. A similar provision, including authorizations for the Department of Energy, was also part of the recently enacted Energy Policy Act of 2005.

#### **Conclusion**

We believe S. 1772 takes several important steps in the right direction by including provisions to streamline refinery permitting requirements and expand refinery capacity in the

U.S. This provides a mechanism to reduce the proliferation of state fuel requirements where such fuels are no longer utilized or duplicative of federal standards, addressing the potential consequences of fuel waivers on state SIP compliance, among other provisions. We look forward to working with the Committee and its Members as it continues to consider this legislation and provide the Committee with any needed technical assistance.

Thank you for the opportunity to appear before you today. I would be happy to answer any questions that you may have.